## IN THE CLAIMS:

Please substitute the following claims for the same-numbered claims in the application:

1.      (Previously Presented) A computer-implemented method of mining association rules over transactions from datasets while maintaining privacy of individual transactions within said datasets through randomization, said method comprising:

   randomizing an original dataset to create a randomized dataset, said randomizing comprising:

      randomly dropping true items from each transaction in said original dataset; and

      randomly inserting false items into each transaction in said original dataset;

   collecting said randomized dataset in a database;

   determining support of an association rule in said randomized dataset;

   estimating support of said association rule in said original dataset based on said support of said association rule in said randomized dataset; and

   outputting said association rule if said support of said association rule in said original data set is estimated to be greater than a predetermined minimum,

   wherein, due to said randomizing, privacy breaches of said individual transactions are controlled.

2.      (Previously Presented) The method according to claim 1, wherein said randomizing comprises per transaction randomizing, such that randomizing operators are applied to each transaction independently.

3.      (Previously Presented) The method according to claim 1, wherein said randomizing is item-invariant such that a reordering of said transactions does not affect outcome probabilities.

4.     (Previously Presented) The method according to claim 1, wherein said dropping of said true items and said inserting of said false items are carried out to an extent such that the chance of finding a false itemset in a randomized transaction relative to the chance of finding a true itemset in said randomized transaction is above a predetermined threshold.

5.     (Previously Presented) The method according to claim 4, wherein said predetermined threshold provides that the chance of finding a false itemset in said randomized transaction is approximately equal to the chance of finding a true itemset in said randomized transaction.

6.     (Previously Presented) The method according to claim 1, wherein said dropping of said true items and said inserting of said false items are performed independently on said transactions prior to said transactions being collected in a database.

7.     (Previously Presented) A computer-implemented method of mining association rules from databases while maintaining privacy of individual transactions within said databases through randomization, said method comprising:

randomizing an original dataset to create a randomized dataset, said randomizing comprising:

randomly dropping true items from each transaction in said original dataset;

randomly inserting false items into each transaction in said original dataset;

collecting said randomized dataset in a database;

mining said database to recover an association rule in said original dataset after said dropping and inserting processes, wherein said mining comprising:

determining support for said association rule in said randomized dataset;

estimating support of said association rule in said original dataset based on said support of said association rule in said randomized dataset; and

outputting said association rule if said support of said association rule in said original data set is estimated to be greater than a predetermined minimum,

wherein, due to said randomizing, privacy breaches of said individual transactions are controlled during said mining.

8.     (Previously Presented) The method according to claim 7, wherein said randomizing comprises per transaction randomizing, such that randomizing operators are applied to each transaction independently.

9.     (Previously Presented) The method according to claim 7, wherein said randomizing is item-invariant such that a reordering of said transactions does not affect outcome probabilities.

10.     (Previously Presented) The method according to claim 7, wherein said dropping of said true items and said inserting of said false items are carried out to an extent such that the chance of finding a false itemset in a randomized transaction relative to the chance of finding a true itemset in said randomized transaction is above a predetermined threshold.

11.     (Previously Presented) The method according to claim 7, wherein said predetermined threshold provides that the chance of finding a false itemset in said randomized transaction is approximately equal to the chance of finding a true itemset in said randomized transaction.

12.     (Previously Presented) The method according to claim 7, wherein said dropping and said inserting are performed independently on said transactions prior to said transactions being collected in said database.

13.     (Currently Amended) A computer-implemented method of mining association rules from datasets while maintaining privacy of individual transactions within said datasets through randomization, said method comprising:

    creating randomized transactions from an original dataset by:

        randomly dropping true items from each transaction in said original dataset, and

        randomly inserting false items into each transaction in said original dataset;

creating a randomized dataset by collecting said randomized transactions;

collecting said randomized dataset in a database; and

mining said database to recover an association rule in said original dataset after said dropping and inserting processes, wherein said mining comprises:

determining support for said association rule ins said randomized dataset;

estimating support of said association rule in said original datase based on said support for said association rule in said randomized dataset; and

outputting said association rule if said support of said association rule in said original data set is estimated to be greater than a predetermined minimum,

wherein, due to said creating of said randomized transactions, privacy breaches of said individual transactions are controlled during said mining.


14. (Previously Presented) The method according to claim 12, wherein said process of creating randomized transactions comprises per transaction randomizing, such that randomizing operators are applied to each transaction independently.


15. (Previously Presented) The method according to claim 13, wherein said process of creating randomized transactions is item-invariant such that a reordering of said transactions does not affect outcome probabilities.


16. (Previously Presented) The method in claim 13, wherein said dropping of said true items and said inserting of said false items are carried out to an extent such that the chance of finding a false itemset in a randomized transaction relative to the chance of finding a true itemset in said randomized transaction is above a predetermined threshold.


17. (Previously Presented) The method according to claim 16, wherein said predetermined threshold provides that the chance of finding a false itemset in said randomized transaction is approximately equal to the chance of finding a true itemset in said randomized transaction.

18.     (Previously Presented) The method according to claim 13, wherein said process of creating randomized transactions is performed independently on said transactions prior to the transactions being collected in said database.

19.     (Previously Presented) A computer program product on a computer-readable medium and tangibly embodying a program of instructions executable by a computer to perform a method of mining association rules from databases while maintaining privacy of individual transactions within said databases through randomization, said method comprising:

randomizing an original dataset to create a randomized dataset, said randomizing comprising:

randomly dropping true items from each transaction in said original dataset;

randomly inserting false items into each transaction in said original dataset;

collecting said randomized dataset in a database; and

mining said database to recover an association rule in said original dataset after said dropping and inserting processes, wherein said mining comprises:

determining support for said association rule in said randomized dataset;

estimating support of said association rule in said original dataset based on said support of said association rule in said randomized dataset; and

outputting said association rule if said support of said association rule in said original data set is estimated to be greater than a predetermined minimum,

wherein, due to said randomizing, privacy breaches of said individual transactions are controlled during said mining.

20.     (Previously Presented) The computer program product according to claim 19, wherein said randomizing comprises per transaction randomizing, such that randomizing operators are applied to each transaction independently.

21.    (Previously Presented) The computer program product according to claim 19, wherein said randomizing is item-invariant such that a reordering of said transactions does not affect outcome probabilities.

22.    (Previously Presented) The computer program product according to claim 19, wherein said dropping of said true items and said inserting of said false items are carried out to an extent such that the chance of finding a false itemset in a randomized transaction relative to the chance of finding a true itemset in said randomized transaction is above a predetermined threshold.

23.    (Previously Presented) The computer program product according to claim 22, wherein said predetermined threshold provides that the chance of finding a false itemset in said randomized transaction is approximately equal to the chance of finding a true itemset in said randomized transaction.

24.    (Previously Presented) The computer program product according to claim 19, wherein said dropping and said inserting are performed independently on said transactions prior to said transactions being collected in said database.